## **Preface**

The International Biostatistics Conference in the Study of Toxicology was held from May 23 to May 25, 1991, at Sanjo Kaikan, University of Tokyo, Japan, under auspices of the Biometric Society, Japanese Region; Environmental Mutagen Society of Japan: Japanese Society for Biopharmaceutical Statistics; National Institute of Hygienic Sciences, Japan; and the National Institute of Environmental Health Sciences, USA.

The main object was for biostatisticians and toxicologists to discuss the application of statistical methods for the evaluation of toxicological data. The topics of the conference included survival time and time to tumor, multiplicity and combining data in long-term animal experiments, design and performance of statistical methods in short-term experiments, and extrapolation from *in vitro* to *in vivo*, from high dose to low dose, and from animal to human in risk assessment. The exchange of ideas and methodologies developed in each field and also in each country was another important object of the conference. This was the

first international conference of its kind, and the conference attracted the interest of many scientists.

We hope this compilation of papers presented at the conference will be useful to scientists involved in research concerning designing and evaluating toxicological experiments in particular, and risk assessment of toxicants in general. The importance of statistical methods in toxicology is recognized and methodologies are rapidly developing. Although not all methodological areas are covered, current theoretical and applied topics are considered in these proceedings.

We express our sincere thanks to those who cooperated in the conference.

AKIRA SAKUMA DAVID G. HOEL MAKOTO HAYASHI TAKASHI YANAGAWA ISAO YOSHIMURA